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less enamel loss (0.06 microns for the Gantrez sample and 0.09 microns for the polyvinylphosphonic acid vs. 0.24 for the benchmark) than the benchmark, indicating the compositions of this invention provide enhanced protection against tooth erosion.

What is claimed is:

- 1. An oral care composition comprising:
- (a) an orally acceptable vehicle;
- (b) 0.05-3% by weight of a mucoadhesive polymer, wherein said mucoadhesive polymer is a copolymer of a methylvinyl ether and a maleic anhydride;
- (c) a calcium compound or salt that becomes more soluble at acidic pH in an effective amount to provide protection against erosion of tooth enamel; and

(d) 5-40% by weight of a siliceous abrasive,

wherein the calcium compound or salt is precipitated calcium carbonate having a pH of about 8.75, which, when solubilized, reacts with the tooth enamel to shift the solubility equilibrium away from dissolution of the tooth enamel, wherein the mucoadhesive polymer confines some of the calcium compound or salt at the surface of a tooth, wherein the calcium compound or salt has a longer residence time in proximity to the

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tooth, where the residence time is longer compared to a composition which does not contain the mucoadhesive polymer, and

wherein the composition does not include triclosan; and wherein the composition has less enamel loss, when measured against a reference standard, upon challenge in an aqueous solution with about 5% by wt. of citric acid.

- 2. A method of reducing acid based erosion of teeth 10 comprising:
 - 1) providing an effective amount of the oral care composition of claim 1; and
 - 2) delivering the composition to the oral cavity of a subject, wherein delivering the composition deposits a layer of the copolymer of a methylvinyl ether and a maleic anhydride and metal compound or salt on tooth enamel.
 - 3. The oral care composition of claim 1, wherein the composition comprises more precipitated calcium carbonate than siliceous abrasive.
 - **4**. The oral care composition of claim **1**, wherein the composition is in the form of a single homogeneous phase.

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